Jan. 20, 1953 F. H. MAGNUS 2,625,768

BUBBLE-BLOWING AND SOUND-PRODUCING TOY

Filed Nov. 21, 1950

Fig. 1.

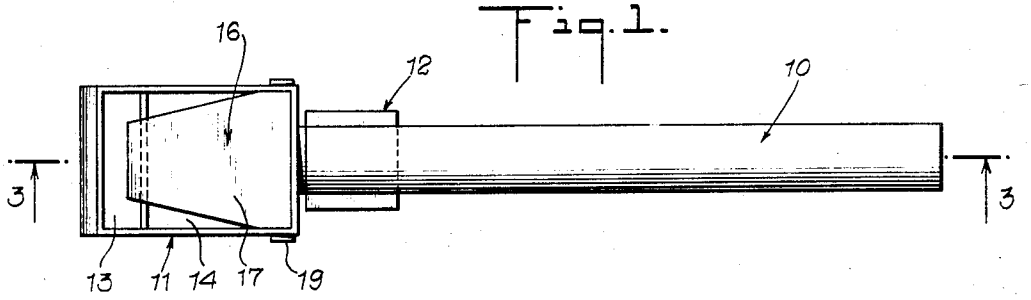
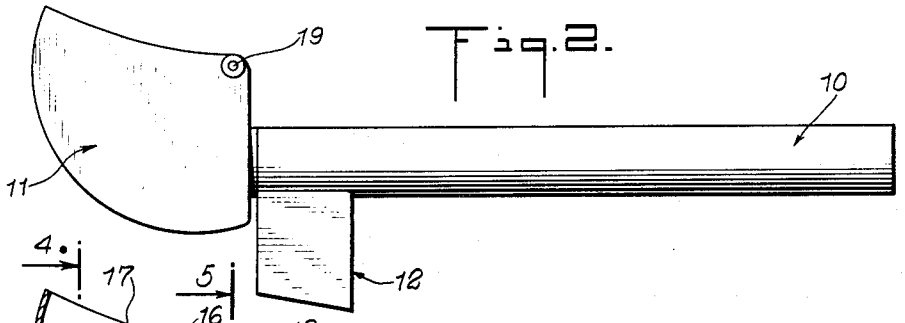


Fig. 2.



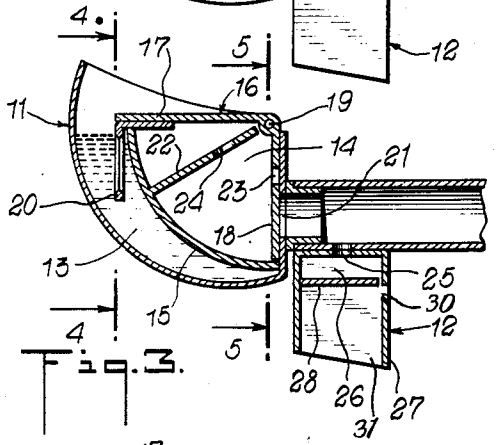
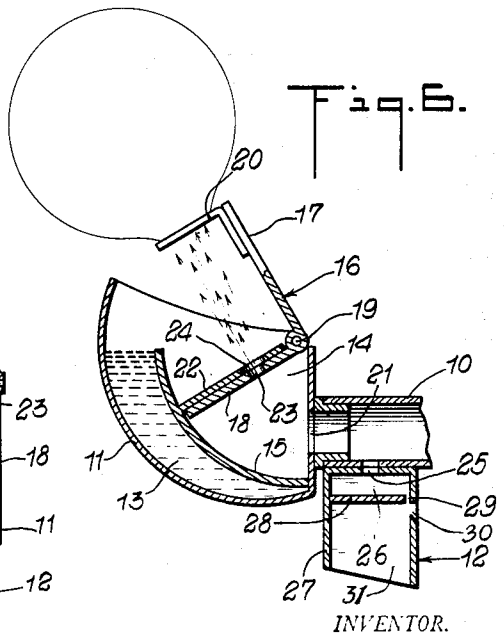


Fig. 3.

Fig. 6.



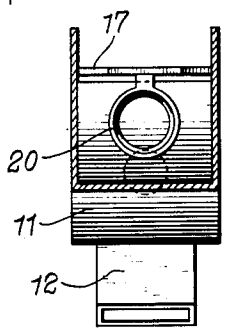


Fig. 4

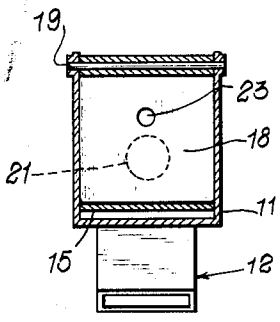


Fig. 5.

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BUBBLE-BLOWING AND SOUND-PRODUCING TOY

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10 Claims. (Cl. 46—7)

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The present invention relates to a bubble-blowing toy and relates more particularly to a combined bubble-blowing and noise-making pipe.

An object of the present invention is to provide a novel and amusing toy for blowing bubbles which contain a supply of a bubble-forming substance and can be operated over a period of time to produce a large number of bubbles without replenishing the supply of the bubble-forming substance. Another object of the invention is to provide a bubble-blowing toy which produces a noise as the bubbles are blown. Such a toy is amusing and entertaining to both adults and children.

Various other objects and advantages of the invention will be apparent and best understood from the following description and the accompanying drawings in which:

Fig. 1 is a plan view taken from the top of a bubble-blowing toy embodying the invention;

Fig. 2 is a side view of the bubble-blowing toy illustrated in Fig. 1;

Fig. 3 is a section view taken along the line 3—3 of Fig. 1;

Fig. 4 is a section view taken along the line 4—4 of Fig. 3;

Fig. 5 is a section view taken along the line 5—5 of Fig. 3; and

Fig. 6 is a fragmentary section view corresponding to Fig. 3, but showing the parts in a different position.

Referring to the drawings in detail, there is a stem 10 that is attached to a bowl 11. The stem 10 is in the form of a hollow tube and forms a passageway that communicates at one end with the bowl 11 and a noise-making device 12 which is also attached to the stem 10. The other end of the stem 10 is open and forms a mouthpiece through which air may be blown into the passageway extending through the stem.

The bowl 11 is divided into a reservoir 13 and an air chamber 14 by an upwardly extending partition member 15 which extends across the interior of the bowl 11 and between the sides thereof. The reservoir 13 may be filled with a bubble-forming liquid of the type that will form a film across a ring or other member having an aperture therein such as the well-known solutions containing glycerin that are available commercially. The front of the bowl and the sides of the bowl joining the front extend somewhat above the top of the partition 15 to prevent liquid spilling from the reservoir 13 when it is filled.

A member 16 which has two angularly spaced arms 17 and 18 is pivoted at the top and rear edges of the side walls forming the bowl 11, as indicated at 19. The arm 17 extends across the top of the chamber 14 and carries a downwardly extending annular member or ring 20 at its outer end. When the member 16 is in its lowered position, the arm 17 rests on top of the partition 15 and the ring 20 extends into the liquid in the reservoir 13, as illustrated in Figs. 3 and 4.

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The other arm 18 of the pivoted member 16 extends downwardly into the chamber 14 between the sides of the bowl 11 and rests against the back of the bowl when the pivoted member is in its lowered position, as illustrated in Figs. 3 and 5. When the arm 18 is in this position, it extends across and closes an opening 21 in the rear of the bowl through which the stem 10 communicates with the chamber 14. Thus, when air is blown into the stem 10 and through the opening 21, it strikes the arm 18 of the pivoted member 16 and raises the pivoted member to the position illustrated in Fig. 6 at which position the arm 18 strikes a strut 22 extending across the chamber 14 and further movement of the pivoted member is prevented thereby. This movement of the pivoted member 16 raises the forwardly extending arm 17 and the ring 20 carried thereon to a position where the ring 20 is clear of the reservoir 13 and is above the lip at the front of the bowl 11.

The downwardly extending arm 18 has an opening 23 therein which is aligned with the opening in the ring 20 and which also registers with an opening 24 in the strut 22 when the pivoted member 16 is in its raised position as illustrated in Fig. 6. However, these openings are arranged so that the opening 23 in the arm 18 is offset from the passageway 21 in the rear of the bowl 11 and the area of the opening 23 in the arm 18 is somewhat smaller than the area of the passageway 21 and these areas are so proportioned in relation to each other that sufficient air will be confined in the chamber 14 to maintain the pivoted member 16 in its elevated position as long as air is blown through the stem 10 and into the chamber 14.

The air that is blown into the stem 10 and through the passageway 21 into the chamber 14, emerges as a jet that is directed toward the ring 20. When the ring 20 is raised after being immersed in the liquid in the reservoir 13, it carries a film of the bubble-forming liquid across the opening therein and when the jet of air from the aperture 23 strikes this film of liquid on the ring, it forms a succession of bubbles. After the film of liquid on the ring has been exhausted, the pivoted member 16 is permitted to return to its lowered position where the ring will once more

be immersed in the liquid to receive a new film of the liquid by merely interrupting the blowing of air into the stem 10 momentarily. This procedure can be continued as long as the supply of liquid in the reservoir 13 lasts and a tremendous number of bubbles can be produced very quickly.

The noise-making device 12 is operated simultaneously with and from the same source of air that is used to produce the bubbles. In the particular embodiment illustrated, the noise-making device 12 is in the form of a whistle that produces a hissing noise. The whistle is attached to the stem 10 at a point adjacent the bowl 11 and communicates with the passageway in the stem through an opening 25. The whistle is formed by a chamber 26 having downwardly extending side walls 27 and a partition member 28. The sound is produced by air escaping through a slot 29 along one side of the partition 28 adjacent a port 30 in a tone chamber 31. The tone chamber 31 is formed by the side walls 27 and is open at its bottom.

The over-all effect of the blowing of bubbles and the simultaneous production of noise in accordance with the present invention provides a toy that is extremely attractive and amusing. It is also possible to make practically all of the parts of this toy from suitable plastic materials so that it may be made and sold cheaply.

If desired, the bowl 11 may be formed in other shapes than that illustrated such as an animal's head or the like to give the toy a novel and attractive appearance. In such case, the bowl may form the portion of the head including the lower jaw and the upper portion of the head including the upper jaw may be secured to the member 16 in such a way that the jaws will open and the bubbles will emerge therefrom when air is blown into the stem. In such case, the noise-making device 12 may be designed to produce a noise simulating a noise the animal represented might make.

It will be understood that various modifications and changes may be made in the embodiment of the invention illustrated and described herein by those skilled in the art without departing from the scope of the invention as defined by the following claims.

I claim:

1. In a toy for blowing bubbles, the combination of a bowl having a reservoir and an air chamber therein, said reservoir containing a supply of a liquid for forming bubbles, a hollow stem having one end open and the other end in communication with an opening in the bowl, said opening in the bowl communicating with the air chamber, a member pivoted on the bowl, said member extending into the air chamber and being movable from a lowered position to a raised position within the air chamber upon air being blown into the air chamber through the hollow stem, a second pivoted member secured to the first-mentioned pivoted member and being movable therewith between a raised position and a lowered position and a downwardly extending member carried by said second pivoted member and extending into the reservoir in the bowl at the lowered position of said pivoted members, said downwardly extending member having an opening therein aligned with a second opening in the air chamber when the pivoted members are in the raised position thereof.

2. In a toy for blowing bubbles, the combination as defined in claim 1 which includes air-operable sound-producing means supported on the hollow stem and in communication therewith.

3. In a toy for blowing bubbles, the combination of a bowl, a partition in said bowl dividing the bowl into an air chamber and a reservoir, a hollow stem communicating with the air chamber through an opening in the bowl and a member pivotally supported on said bowl, said member being movable between a raised position and a lowered position and consisting of two arms angularly displaced with respect to each other, an annular member carried by one of the arms of said pivoted member and extending into the reservoir within the bowl at the lowered position of said pivoted member, the other of said arms extending into the air chamber and across the opening in the bowl communicating with the stem, said last-mentioned arm having an aperture therein offset with respect to the opening in the bowl communicating with the stem and aligned with the annular member on the other of said arms.

4. In a toy for blowing bubbles, the combination of a bowl, a partition in said bowl dividing the bowl into an air chamber and a reservoir, a hollow stem communicating with the air chamber through an opening in the bowl and a member pivotally supported on said bowl, said member being movable between a raised position and a lowered position and consisting of two arms angularly displaced with respect to each other, an annular member carried by one of the arms of said pivoted member and extending into the reservoir within the bowl at the lowered position of the pivoted member, the other of said arms extending into the air chamber and across the opening in the bowl communicating with the stem, said last-mentioned arm having an aperture therein offset with respect to the opening in the bowl communicating with the stem and aligned with the annular member on the other of said arms and air-operated means for producing sound supported on the hollow stem and in communication therewith.

5. In a toy for blowing bubbles, the combination of a bowl, a partition in said bowl dividing the bowl into an air chamber and a reservoir, a hollow stem communicating with the air chamber through an opening in the bowl and a member pivotally supported on said bowl, said member being movable between a raised position and a lowered position and consisting of two arms angularly displaced with respect to each other, an annular member carried by one of the arms of said pivoted member, said annular member extending into the reservoir within the bowl at the lowered position of the pivoted member, the other of said arms extending into the air chamber and across the opening therein communicating with the stem, said last-mentioned arm having an aperture therein offset with respect to the opening in the bowl communicating with the stem and aligned with the annular member on the other of said arms and means in the air chamber for engaging with the second of said arms at a raised position thereof.

6. In a toy for blowing bubbles, the combination of a bowl having spaced side walls and a partition in said bowl dividing the bowl into an air chamber and a reservoir, a hollow stem communicating with the air chamber through an opening in the bowl and a member pivotally supported on said bowl, said member being movable between a raised position and a lowered position and consisting of two arms angularly dis-

placed with respect to each other, a downwardly extending ring carried by one of the arms of said pivoted member, said ring extending into the reservoir within the bowl at the lowered position of the pivoted member, the other of said arms extending into the air chamber and between the side walls of the bowl, said last-mentioned arm extending across the opening communicating with the stem and having an aperture therein offset with respect to said opening, said aperture being of smaller area than the area of the opening communicating with the stem and being aligned with an opening in the downwardly extending ring on the other of said arms.

7. In a toy for blowing bubbles, the combination as defined in claim 7 which includes an air-operable sound-producing device supported on and in communication with the stem.

8. In a toy for blowing bubbles, the combination of a bowl having spaced side walls and a partition in said bowl dividing the bowl into an air chamber and a reservoir, a hollow stem communicating with the air chamber through an opening in the bowl, a member pivotally supported on said bowl, said member being movable between a raised position and a lowered position and consisting of two arms angularly displaced with respect to each other, a downwardly extending ring-shaped member carried by one of the arms of said pivoted member, said ring-shaped member extending into the reservoir within the bowl at the lowered position of the pivoted member, the other of said arms extending into the air chamber and between the side walls of the bowl, said last-mentioned arm extending across the opening communicating with the stem and having an aperture therein offset with respect to said opening, said aperture being of smaller area than the area of the opening communicating with the stem and a fixed member in the air chamber engaging with the arm in the air chamber at its raised position, said fixed member having an opening therein aligned with an opening in the ring-shaped member and communicating with the opening in the arm extending into the air chamber at the raised position of the pivoted member.

9. In a toy for blowing bubbles, the combination of a bowl having spaced side walls and a partition in said bowl dividing the bowl into an air chamber and a reservoir, a hollow stem communicating with the air chamber through an opening in the bowl, a member pivotally supported on said bowl, said member being movable between a raised position and a lowered position and consisting of two arms angularly displaced with respect to each other, a downwardly extending ring-shaped member carried by one of the arms of said pivoted member, said ring-shaped member extending into the reservoir within the bowl at the lowered position of the pivoted member, the other of said arms extending into the air chamber and between the side walls of the bowl, said last-mentioned arm extending across the opening communicating with the stem and having an aperture therein offset with respect to said opening, said aperture being of smaller area than the area of the opening communicating with the stem and a fixed member in the air chamber engaging with the arm extending into the air chamber at its raised position, said fixed member having an opening therein aligned with an opening in the ring-shaped member at the raised position of the pivoted member, said opening in the fixed member registering with the opening in the arm extending into the air chamber at the raised position thereof.

10. In a toy for blowing bubbles, the combination of a bowl having spaced side walls and a partition in said bowl dividing the bowl into an air chamber and a reservoir, a hollow stem communicating with the air chamber through an opening in the bowl, a member pivotally supported on said bowl, said member being movable between a raised position and a lowered position and consisting of two arms angularly displaced with respect to each other, a downwardly extending ring-shaped member carried by one of the arms of said pivoted member, said ring-shaped member extending into the reservoir within the bowl at the lowered position of the pivoted member, the other of said arms extending into the air chamber and between the side walls of the bowl, said last-mentioned arm extending across the opening communicating with the stem and having an aperture therein offset with respect to said opening, said aperture being of smaller area than the area of the opening communicating with the stem and a fixed member in the air chamber engaging with the arm in the air chamber at its raised position, said fixed member having an opening therein aligned with an opening in the ring-shaped member at the raised position of the pivoted member, said opening in the fixed member registering with the opening in the arm extending into the air chamber at the raised position thereof and air-operable sound-producing means supported on the stem and in communication therewith.

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